

TITLE OF THE INVENTION

Accounting System

BACKGROUND OF THE INVENTION

5 1. Field of the Invention

The present invention relates to an accounting system, and in particular to technology for speeding up the accounting when preparing a financial report for an entire group corporation consisting of a plurality of companies.

10

2. Related Art

In recent years, commercial transactions between member corporations within group corporations have become large-scale and extremely complicated. Corporate evaluation
15 of these corporations using consolidated accounting for the entire group corporation, rather than non-consolidated accounting conducted separately for each corporation, has internationally become the norm, with the importance of consolidated accounting also being gradually recognized in
20 Japan in recent years.

The difference between non-consolidated and consolidated accounting is discussed briefly here. With non-consolidated accounting, for example, if Company A bills Company B for 100 dollars, Company B appropriates 100 dollars

as a debit amount relating to Company A, and Company A appropriates 100 dollars as a credit amount relating to Company B. This results in a sale based on the transaction with Company B appearing on Company A's financial report, and an expenditure based on the transaction with Company A appearing on Company B's financial report.

In contrast, with consolidated accounting, companies A and B are considered as a single group corporation, and a financial report is prepared with Company A's 100 dollar credit with respect to Company B and Company B's 100 dollar debit with respect to Company A offsetting one another. Thus, with the financial report for the entire group corporation that includes Company A and Company B, the respective sale and expenditure based on the transaction between companies A and B are eliminated.

Here, "elimination" refers to the non-appropriation of credits and debits in the financial report for an entire group corporation, due to the offsetting, in the accounting process for the entire group corporation, of debits and credits provisionally appropriated in the accounting between individual corporations within the group corporation based on commercial transactions between these corporations.

To implement this elimination, complicated and time-consuming processing is needed in the accounts

department of individual corporations to carefully examine and approve the billing content (see Japanese Patent Publication No. 11-203373).

In recent years, corporations in Japan have been rapidly diversifying and internationalizing, as seen in the expansion of economic activities and the procurement of overseas capital now being actively pursued. Also, the environment in which corporations operate has changed remarkably, with the increasing participation of foreign investors in the Japanese share market, for instance, and, together with the strengthening trend in corporations towards recognizing the importance of consolidated accounting, the demand for consolidated information from investors in order to precisely infer risks and returns borne by industry groups is on the increase. In particular, the prompt presentation of financial reports for group corporations is an important element in strengthening investor trust, and also in deciding the timing and amount of investments.

However, the elimination of appropriated credits and debits arising from commercial transactions between individual corporations within a group corporation is, as mentioned above, a time-consuming process and one of the primary factors delaying the preparation of financial

reports for entire group corporations.

SUMMARY OF THE INVENTION

In view of the above issues, the present inventions aims
5 to provide an accounting system that allows for the speeding
up of consolidated accounting when preparing a financial
report for an entire group corporation consisting of a
plurality of companies, with respect to investors and the
like.

10 To realize this object, an accounting system pertaining
to the present invention includes a bill-issuing device and
a bill-receiving device. The bill-issuing device is
connected to a database and includes: a first receiving unit
operable to sequentially receive input of (i) billing data
15 for appropriation in consolidated accounting and (ii)
billing data not for appropriation in consolidated
accounting; an entry unit operable to enter the received
billing data in the database; an extraction unit operable
to extract billing data not for appropriation from the
20 received billing data; an output unit operable to output the
extracted billing data to the bill-receiving device; and an
exclusion unit operable to clear specified billing data
entered in the database, as billing data not for
appropriation, and to exclude the specified billing data that

has been cleared from being appropriated. The bill-receiving device includes: a second receiving unit operable to receive the billing data outputted from the bill-issuing device; and a notification unit operable to notify the bill-issuing
5 device of the receipt of the billing data. Here, the exclusion unit excludes the billing data whose receipt is notified, as the specified billing data.

Alternatively, an accounting system pertaining to the present invention may include a bill-issuing device
10 connected to a first database, a server connected to a second database that stores an exclusion list showing a correspondence between a biller and a billee that are not targeted for consolidated accounting, and a bill-receiving device. The bill-issuing device may include: a first
15 receiving unit operable to sequentially receive input of (i) billing data for appropriation in consolidated accounting and (ii) billing data not for appropriation in consolidated accounting; a first transmission unit operable to transmit received billing data to the server; an entry unit operable
20 to enter received billing data in the first database; and an exclusion unit operable to clear specified billing data entered in the database, as billing data not for appropriation, and to exclude the specified billing data that has been cleared from being appropriated. The server may

include: a second receiving unit operable to receive the billing data transmitted from the bill-issuing device; a judgment unit operable to judge whether the received billing data is for appropriation, depending on whether the biller and billee of the billing data are shown in the exclusion list; and a second transmission unit operable to transmit the received billing data to the bill-receiving device if judged to be not for appropriation. The bill-receiving device may include: a third receiving unit operable to receive the billing data transmitted from the server; and a notification unit operable to notify the bill-issuing device of the receipt of the billing data. Here, the exclusion unit may exclude the billing data whose receipt is notified, as the specified billing data.

Also, the bill-issuing device and the bill-receiving device may each be a plurality of communication terminals operable to intercommunicate via a telecommunication circuit.

A method pertaining to the present invention is used by a bill-issuing device that is connected to a database and included in an accounting system that further includes a bill-receiving device. The method includes the steps of: receiving input of (i) billing data for appropriation in consolidated accounting and (ii) billing data not for

appropriation in consolidated accounting; entering the received billing data in the database; extracting billing data not for appropriation from the received billing data; outputting the extracted billing data to the bill-receiving
5 device; and clearing outputted billing data whose receipt is notified by the bill-receiving device, as billing data not for appropriation, and excluding the cleared billing data from being appropriated.

Also, a bill-issuing program pertaining to the present
10 invention is used by a bill-issuing device that is connected to a database and included in an accounting system that further includes a bill-receiving device. The bill-issuing program includes the steps of: receiving input of (i) billing data for appropriation in consolidated accounting and (ii)
15 billing data not for appropriation in consolidated accounting; entering the received billing data in the database; extracting billing data not for appropriation from the received billing data; outputting the extracted billing data to the bill-receiving device; and clearing outputted
20 billing data whose receipt is notified by the bill-receiving device, as billing data not for appropriation, and excluding the cleared billing data from being appropriated.

Furthermore, a computer-readable recording medium pertaining to the present invention has recorded thereon a

bill-issuing program used by a bill-issuing device that is connected to a database and included in an accounting system which further includes a bill-receiving device. The bill-issuing program includes the steps of: receiving input
5 of (i) billing data for appropriation in consolidated accounting and (ii) billing data not for appropriation in consolidated accounting; entering the received billing data in the database; extracting billing data not for appropriation from the received billing data; outputting the
10 extracted billing data to the bill-receiving device; and clearing outputted billing data whose receipt is notified by the bill-receiving device, as billing data not for appropriation, and excluding the cleared billing data from being appropriated.

15 According to this configuration, billing data, when not for appropriation, is accepted without scrutiny of the content thereof and excluded from being appropriated for consolidated accounting, thus enabling the billee to quickly eliminate credits appropriated on the basis of commercial
20 transactions between individual corporations within a group corporation, and quickly prepare a financial report for the entire group corporation, with respect to investors.

Here, an accounting system as described above may further include a calculation device operable to calculate

a consolidated accounting amount, based on the billing data entered in the database not excluded by the exclusion unit from being appropriated.

Also, an accounting system as described above may
5 further include a calculation device operable to calculate a consolidated accounting amount, based on the billing data entered in the first database not excluded by the exclusion unit from being appropriated.

Alternatively, a bill-issuing device as described
10 above may further include a calculation unit operable to calculate a consolidated accounting amount, based on the billing data entered in the first database not excluded by the exclusion unit from being appropriated.

Since it is possible, according to this configuration,
15 to calculate a consolidated closing account after excluding billing data not for appropriation from the calculation, the consolidated closing account can be calculated without performing unnecessary operations.

Here, the bill-issuing device and the bill-receiving
20 device may be connected by a telecommunication circuit, the extraction unit may include a judgment subunit operable to judge whether received billing data is for appropriation, and the output unit may include an online transmission subunit operable to transmit online to the bill-receiving

device, only billing data extracted as billing data not for appropriation.

Also, the database may store an exclusion list showing a correspondence between a biller and a billee that are not
5 targeted for consolidated accounting, and the judgment subunit may judge received billing data to be not for appropriation if the biller and billee of the billing data are shown in the exclusion list.

Furthermore, the bill-issuing device, the server, and
10 the bill-receiving device may be connected by a telecommunication circuit, and the second transmission unit may transmit online to the bill-receiving device, only billing data judged to be not for appropriation.

According to this configuration, it is automatically
15 judged whether billing data is for appropriation, and when this is the case (i.e. when not for appropriation), the billing data is transmitted to the billee using a transmission method, with this fact made identifiable, thus enabling the billee to easily identify billing data not for
20 appropriation, and for accounting operations to proceed smoothly.

Here, the bill-issuing device, the server, and the bill-receiving device may be connected by a telecommunication circuit, and the second transmission unit

may transmit online to the bill-receiving device, only billing data judged to be not for appropriation.

Also, the notification unit may perform the notification online in realtime.

5 Since the bill-issuing device, according to this configuration, is immediately notified on receipt by the bill-receiving device of billing data not for appropriation, the bill-issuing device is able to quickly exclude billing data not for appropriation from being appropriated.

10 Here, a bill-receiving device pertaining to the present invention may be connected to a database and receive (i) billing data for appropriation in consolidated accounting and (ii) billing data not for appropriation in consolidated accounting. The bill-receiving device may include: a first
15 entry unit operable to enter received billing data not for appropriation in the database; an exclusion unit operable to exclude billing data entered in the database from being appropriated; an approval unit operable to approve received billing data based on an input from a user; and a second entry
20 unit operable to enter approved billing data for appropriation in the database.

According to this configuration, billing data, when not for appropriation, is accepted without scrutiny of the content thereof and excluded from being appropriated for

consolidated accounting, thus enabling the billee to quickly eliminate credits appropriated on the basis of commercial transactions between individual corporations within a group corporation, and quickly prepare a financial report for the
5 entire group corporation, with respect to investors.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other objects, advantages, and features of the invention will become apparent from the following
10 description thereof taken in conjunction with the accompanying drawings, which illustrate specific embodiments of the present invention.

In the drawings:

- 15 Fig.1 is a functional block diagram of an accounting system KS1 in an embodiment 1 of the present invention;
Fig.2 shows a data structure of billing data (biller);
Fig.3 shows a specific example of a credit/debit table 110 stored in a database DB1;
20 Fig.4 shows a specific example of a credit/debit table 210 stored in a database DB2;
Fig.5 shows a specific example of a consolidated financial report prepared by a report preparation unit 3002;
Fig.6 shows a specific example of a consolidated financial

report prepared by a report preparation unit 4002;
Fig.7 shows operations performed in a biller accounting
device 100;
Fig.8 shows operations performed in a billee accounting
5 device 200;
Fig.9 shows operations performed in appropriation device
300;
Fig.10 is a functional block diagram of an accounting system
KS2 in an embodiment 2;
10 Fig.11 shows a specific example of a full-amount receipt
target list 403 entered in a database DB3;
Fig.12 shows a configuration of an accounting system KS3
pertaining to an embodiment 3;
Fig.13 shows an input screen for generating billing data for
15 display by a biller terminal 501
Fig.14A shows a specific example of generated billing data;
Fig.14B shows a specific example of receipt data;
Fig.14C shows a specific example of transaction data after
approval;
20 Fig.15 shows a specific example of billing data displayed
on a display monitor of a billee terminal 503 equating
to billing-data reception unit 201, on receipt of
billing data relating to a full-amount receipt
agreement target, transmitted from server 506;

Fig.16 shows a specific example of a screen for inputting
a full-amount receipt flag and a full-amount receipt
number;

Fig.17 shows a specific example of journal data generated
5 by a biller master terminal 501A;

Fig.18 shows a specific example of journal data generated
by a billee master terminal 503A; and

Fig.19 schematically shows the process by which consolidated
accounting for an entire group corporation is prepared,
10 after credits and debits based on commercial
transactions between individual corporations within
the group corporation (i.e. credits and debits targeted
for checklist processing) have been eliminated from
appropriation in consolidated accounting, with respect
15 to the overall commercial transactions undertaken by
the corporations.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Embodiments of the present invention are described in
20 detail below using the drawings.

Embodiment 1

Fig.1 is a functional block diagram of an accounting
system KS1 according to the present embodiment.

Accounting system KS1 is constituted from a biller accounting device 100, a billee accounting device 200, appropriation devices 300 and 400, and databases DB1 and DB2.

5 *Biller Accounting Device 100*

Biller accounting device 100 is constituted from a billing-data (BDAT) generation unit 101, an approval unit 102, an entry unit 103, a full-amount receipt target (FART) judgment unit 104, and a notification reception (NR) unit
10 105.

BDAT generation unit 101 generates billing data based on input data from a user. Generated billing data indicates a billing amount, and the company that applies biller accounting device 100 (hereinafter, "home company") is the
15 billing party (hereinafter, "biller") of the billing data. Billing data, as shown in Fig.2, includes billing-data identification (BDAT-ID) information, biller identification (ID) information, billee identification (ID) information, amount information, and usage information.

20 BDAT-ID information identifies the billing data, biller ID information identifies the biller, and billee ID information identifies the billed party (hereinafter, "billee"). Amount information shows a billing amount in monetary terms, and usage information shows remarks relating

to the billing amount.

Approval unit 102 approves billing data generated by BDAT generation unit 101, based on inputs from the user. Approved billing data is passed on to entry unit 103 and FART judgment unit 104. Specifically, processing is performed in unit 102 to check for errors in the billing data. If there are no errors, the generated billing data is passed on to units 103 and 104 without alteration, as billing data whose content has been approved. If there is an error, billing data whose content has been corrected on the basis of user inputs is passed on to units 103 and 104 as approved billing data.

Also, approval unit 102 receives inputs from the user of billing data whose biller is another company, and approves this billing data based on user inputs.

Entry unit 103 writes billing data received from approval unit 102 to a credit/debit (CR/DB) table 110 stored in a database DB1. Fields are provided in table 110 for writing the information included in the billing data, and unit 103 records the information in corresponding fields.

In addition to the fields for writing billing data information, CR/DB table 110 has fields for writing a notification receipt (NR) flag, a clearance (CLR) flag, and credit and debit information that respectively shows credit and debit amounts corresponding to billing amounts included

in billing data. Entry unit 103 judges whether the billing amount shown in the amount information equates to a credit amount or a debit amount, depending on whether or not the biller ID information shown in the billing data specifies a predetermined biller (here, the home company). If the billing amount equates to a credit amount (i.e. biller ID information specifies the predetermined biller), unit 103 writes the billing amount to the credit information field, and if the billing amount equates to a debit amount (i.e. biller ID information does not specify the predetermined biller), unit 103 writes the billing amount to the debit information field.

Here, the "NR flag" is a flag set on receipt by NR unit 105 (described below) of a receipt notification sent when billing data pertaining to a full-amount receipt target is received from billee accounting device 200 (described below). In other words, this flag identifies whether or not a receipt notification has been received in relation to each piece of billing data for full-amount receipt.

Here, the "CLR flag" is a flag set by appropriation device 300 (described below) once checklist processing by device 300 has been performed. In other words, this flag shows whether or not checklist processing has been performed with respect to each piece of billing data.

Fig.3 shows a specific example of CR/DB table 110 stored in database DB1.

FART judgment unit 104 holds specific billee information, and judges whether inputted billing data
5 pertains to a full-amount receipt target, depending on whether the billee shown by the billee ID information included in billing data received from approval unit 102 matches a billee shown in the specific billee information. When matched, unit 104 judges that the billing data pertains
10 to a full-amount receipt target, and transmits the billing data online to the billee using a telecommunication circuit. When not matched, unit 104 judges that the billing data does not pertain to a full-amount receipt target, and prints out the billing data. The printout is sent by mail to the billee.

15 Note that the biller and billee accounting devices are connected online by the telecommunication circuit.

Here, the specific billee information is a list of companies (billees) having a full-amount receipt agreement with the home company (biller).

20 Here, "full-amount receipt" is an agreement showing the billee's intention to accept billing amounts issued by the biller without scrutinizing the content of the billing data.

NR unit 105 receives receipt notifications sent out from billee accounting device 200 on receipt of billing data

pertaining to full-amount receipt targets. Here, a receipt notification is information that includes a message showing that billing data has been received and a bill number for identifying the billing data. Unit 105 also sets the NR flag
5 in CR/DB table 110 relating to the billing data that matches the bill number included in the receipt notification to a flag showing "received" (see NR flag of BDAT-ID information "01" in Fig.3).

10 *Billee Accounting Device 200*

Billee accounting device 200 is constituted from a billing-data (BDAT) reception unit 201, an entry unit 202, a full-amount receipt (FAR) notification unit 203, a scrutiny-data (SDAT) generation unit 204, an approval unit
15 205, and an entry unit 206.

BDAT reception unit 201 receives billing data transmitted via a transmission line.

Entry unit 202 records received billing data in a credit/debit (CR/DB) table 210 stored in database DB2. Unit
20 202 sets a full-amount receipt (FAR) flag in table 210 when billing data is recorded.

In addition to fields for writing the information included in billing data, CR/DB table 210 has fields for writing a full-amount receipt (FAR) flag, a clearance (CLR)

flag, and credit and debit information that respectively shows credit and debit amounts corresponding to billing amounts included in billing data.

Here, the "FAR flag" is a flag set when entry unit 202
5 records billing data received by BDAT reception unit 201 in CR/DB table 210. In other words, this flag identifies whether or not billing data for full-amount receipt has been received.

Fig.4 shows a specific example of CR/DB table 210 stored
10 in database DB2.

FAR notification unit 203 notifies biller accounting device 100 that billing data has been received. This notification is conducted online in realtime on receipt of billing data.

15 Note that electronic mail indicating the receipt of billing data may be sent out automatically to biller accounting device 100 when billing data is received.

SDAT generation unit 204 generates scrutiny data, which is billing data whose content has been carefully examined.
20 If an error in the billing amount, remarks or the like is revealed by the careful examination, scrutiny data results from the correction of these errors. Note that the careful examination of billing data content is performed irrespective of whether or not the billing data pertains to

a full-amount receipt target.

Approval unit 205 approves scrutiny data generated by SDAT generation unit 204, based on inputs from the user. Approved scrutiny data is passed on to entry unit 206 after
5 removing any billing data targeted for full-amount receipt.

Specifically, processing to check whether scrutiny data contains any errors is performed in approval unit 205 based on user inputs. If there are no errors, unit 205 passes the scrutiny data without alteration to entry unit 206 as
10 approved scrutiny data, and if there is an error, scrutiny data whose content has been corrected on the basis of user inputs is passed on to entry unit 206 as approved scrutiny data.

Entry unit 206 records scrutiny data in CR/DB table 210
15 in database DB2.

Appropriation devices 300 & 400

Appropriation device 300 is constituted from a checklist processing unit 3001 and a report preparation unit
20 3002.

Checklist processing unit 3001 performs checklist processing (described below) based on the NR flags relating to billing data written to CR/DB table 110 stored in database DB1.

Here, "checklist processing" refers to the specification of billing data targeted for full-amount receipt, based on NR flags or FAR flags relating to billing data recorded in CR/DB table 110 or 210, and to the elimination
5 of billing amounts in the billing data from the material for use in preparing consolidated financial reports. Specifically, checklist processing refers to billing data being cleared for elimination, by setting the CLR flag that relates to the billing data to a flag showing "cleared" (see
10 CLR flag of BDAT-ID information "01" in Fig.3).

Report preparation unit 3002, when instructed by the user, calculates a total credit amount, a total debit amount, and an account balance for billing data whose CLR flag shows "uncleared" (i.e excluding billing data whose CLR flag shows
15 "cleared"), based on credit and debit information written to CR/DB table 110 stored in database DB1, and prepares a consolidated financial report as shown in Fig.5.

Here, a consolidated financial report is prepared monthly in response to a user instruction.

20 Appropriation device 400 is constituted from a checklist processing unit 4001 and a report preparation unit 4002.

Checklist processing unit 4001 performs checklist processing based on FAR flags relating to billing data

written to CR/DB table 210 stored in database DB2.

Note that checklist processing is performed with respect to CR/DB table 110 containing the biller's billing data whenever NR unit 105 receives a receipt notification, and performed with respect to CR/DB table 210 containing the billee's billing data whenever entry unit 202 enters billing data in database DB2 and sets the corresponding FAR flag.

Appropriation device 300 finds out that NR unit 105 has received a receipt notification by appropriately monitoring the NR flags set for billing data in CR/DB table 110 stored in database DB1 (e.g. when preparing a financial report), and detecting a "received" flag.

Report preparation unit 4002, when instructed by a user, calculates a total credit amount, a total debit amount, and an account balance for billing data whose CLR flag shows "uncleared" (i.e. excluding billing data whose CLR flag shows "cleared"), based on credit and debit information written to CR/DB table 210, and prepares a consolidated financial report as shown in Fig.6.

Here, a consolidated financial report is prepared monthly in response to a user instruction.

Since consolidated accounting for the entire group corporation can be calculated on the basis of the consolidated financial reports prepared by report

preparation units 3002 and 4002, it is possible to promptly
conduct accounting for the entire group corporation with
credit and debit amounts based on commercial transactions
between individual corporations within the group corporation
5 excluded in advance from appropriation in consolidated
accounting, and to present to investors a consolidated
accounting report that reflects only commercial transactions
conducted with corporations outside the group corporation.

Fig.19 schematically shows the process by which
10 consolidated accounting for an entire group corporation is
prepared, after credits and debits based on commercial
transactions between individual corporations within the
group corporation (i.e. credits and debits targeted for
checklist processing) have been eliminated from
15 appropriation in consolidated accounting, with respect to
the overall commercial transactions undertaken by the
corporations.

In Fig.19, Company A and Company B form a single
corporate group (here, "Corporate Group Z"), and a
20 consolidated accounting amount for Corporate Group Z is
calculated after the credit amount (i.e. the sum
corresponding to "consolidated sales" in the Account Title
field of the Company A data) and debit amount (i.e. the sum
corresponding to "consolidated purchases" in the Account

Title field of the Company B data) based on commercial transactions between companies A and B have been eliminated from appropriation in consolidated accounting, as targets for checklist processing.

5

Operations

1. Biller Accounting Device 100 Operations

The operations of biller accounting device 100 are described here in accordance with Fig.7.

10 Firstly, BDAT generation unit 101 generates billing data on the basis of input information such the billee, billing amount, remarks and the like from the user (S1). Note that billing data may be generated in accordance with a predetermined template. Also, ID numbers identifying
15 individual pieces of billing data may be appended automatically or by user input.

Generated billing data is passed on to approval unit 102 for approval (judged at S2).

If approved (S2=Y), entry unit 103 writes (i.e. enters)
20 the billing data to CR/DB table 110 stored in database DB1 (S3).

Around the time of the entry processing, the generated billing data is passed on to FART judgment unit 104, where a judgment is made as to whether the billing data pertains

to a full-amount receipt target (S4).

Here, if judged to be billing data pertaining to a full-amount receipt target (S4=Y), FART judgment unit 104 transmits the billing data to billee accounting device 200 (S5).

Next, at step S6, biller accounting device 100 waits for a notification indicating the receipt of the billing data (i.e. receipt notification), which is sent by billee accounting device 200 on receipt of the transmitted billing data.

On receipt of the receipt notification (S6=Y), FART judgment unit 104 sets the NR flag that relates to the billing data corresponding to the bill number shown in the receipt notification to a flag showing "received" (S7).

FART judgment unit 104 prints out the billing when judged not to pertain to a full-amount receipt target (S8).

2. Billee Accounting Device 200 Operations

The operations of billee accounting device 200 are described in accordance with Fig.8.

Billee accounting device 200 waits for billing data transmitted from biller accounting device 100 to be received by BDAT reception unit 201 (S11). On receipt of billing data (S11=Y), entry unit 202 sets the FAR flag to show "received"

with respect to the billing data, and writes (i.e. enters) the billing data to CR/DB table 210 in database DB2 (S12).

Around the time of the writing, FAR notification unit 203 notifies biller accounting device 100 of the receipt of the billing data (i.e. sends receipt notification) at step S13.

Also, received billing data is passed on sequentially to SDAT generation unit 204, approval unit 205, and entry unit 206 for the parallel processing of steps S12 and S13, and written (i.e. entered) to CR/DB table 210 of database DB2 (S14, S15, S16).

3. Appropriation Devices 300 & 400 Operations

The operations of appropriation devices 300 and 400 are described here in accordance with Fig.9.

Appropriation devices 300 and 400 wait for the entry of billing data for checklist processing in databases DB1 and DB2, respectively (S21). Here, the judgment as to whether or not such billing data has been entered is performed on the basis of whether the NR flag and FAR flag in billing data to be entered have been set to "received".

When billing data for checklist processing is entered (S21=Y), checklist processing is performed with respect to CR/DB table 110 or 210 (S22).

The following description relates to an embodiment 2 of the accounting system according to the present invention.

Embodiment 2

5 Fig.10 is a functional block diagram of an accounting system KS2 according to the present embodiment.

 The basic structure, although similar to embodiment 1, differs in that the transmission of billing data from biller accounting device 100 to billee accounting device 200 is
10 performed by a server 500, and also in that the judgment as to whether billing data pertains to a full-amount receipt target is performed on the basis of a full-amount receipt target (FART) list 403 entered in a database DB3.

 Billing data passed on from approval unit 102 in biller
15 accounting device 100 is transmitted via a transmission line, and received by a receiving unit 401 in server 500.

 The received billing data is passed on to a full-amount receipt target (FART) judgment unit 402. Unit 402 judges whether the billing data pertains to a full-amount reception
20 target, on the basis of FART list 403 entered in database DB3.

 FART list 403 is, as shown in Fig.11, a list indicating the correspondence between a biller and one or more billees having a full-amount receipt agreement with the biller.

If a full-amount receipt agreement exists with the biller, the billing data is transmitted to the billee, and if a full-amount receipt agreement does not exist with the biller, the billing data is printed out, and the printout
5 is mailed to the billee.

The following description relates to an embodiment 3 of the accounting system according to the present invention.

Embodiment 3

10 Fig.12 shows a configuration of an accounting system KS3 relating to the present embodiment. Accounting system KS3 is an implementation model for when the accounting system of embodiment 2 is applied to Companies A and B which each has a plurality of departments.

15 Accounting system KS3 is formed from a plurality of biller terminals 501, a biller master terminal 501A, a billee network 502, a plurality of billee terminals 503, a billee master terminal 503A, a billee network 504, a inter-business network 505, a server 506, and databases 507 to 509. Biller
20 and billee terminals 501 and 503 are connected respectively to biller and billee master terminals 501A and 503A by telecommunication circuits via biller and billee networks 502 and 504.

Here, biller and billee terminals 501 and 503 equate

respectively to biller and billee accounting devices 100 and 200 in embodiment 2, biller and biller master terminals 501A 503A equate respectively to appropriation devices 300 and 400 in embodiment 2, databases 507, 508 and 509 equate
5 respectively to databases DB3, DB1 and DB2 in embodiment 2, and server 506 equates to server 500 in embodiment 2.

Biller terminals 501, which are provided for every department in the business that issues bills, are computers that include a display monitor, a keyboard, and a mouse. These
10 terminals function to display screens, such as the screen shown in Fig.13, in response to screen display instructions from the user, and when various types of data relating to the different items on the screen shown in Fig.13 are inputted by a user, the terminals generate billing data on the basis
15 of the input data.

Biller network 502 is a transmission line for transmitting/receiving billing and other types of data between individual terminals, and between the terminals and the master terminal.

20 Billee terminals 503, which are provided for every department in the business that issues bills, are computers that include a display monitor, a keyboard, and a mouse.

Biller network 504 is a transmission line for transmitting/receiving billing and other types of data

between individual terminals, and between the terminals and the master terminal.

Inter-business network 505 is a transmission line for transmitting/receiving data between terminals 501/master
5 terminal 501A and terminals 503/master terminal 503A.

FART list 403 in embodiment 2 has been entered in database 507.

Server 506 judges whether billing data transmitted via inter-business network 505 pertains to a full-amount receipt
10 target. Specifically, server 506 judges whether the billee of billing data from a terminal 501 is a business operation having a full-amount receipt agreement by referring to FART list 403 entered in database 507. If the billee has such an agreement, server 506 transmits the billing data to the
15 business operation via inter-business network 505, and if the billee does not have such an agreement, server 506 prints out the billing data, and the printout is mailed to the billee.

Database 508 stores billing data generated by the biller and journal data that equates to CR/DB table 110 in
20 embodiment 2.

Database 509 stores billing data received by the billee, and journal data that equates to CR/DB table 210 in embodiment 2.

The following description relates to the realization,

in accounting system KS3, of processing performed by biller accounting device 100 in embodiment 2.

Firstly, a biller terminal 501 equating to BDAT generation unit 101 generates billing data based on data
5 inputted by a user via the screen shown in Fig.13, and transmits the generated data to a biller terminal 501 equating to approval unit 102 via biller network 502 for approval.

Here, generated billing data includes, specifically,
10 information such as a biller business operation code ("BILLER BOP CODE"), a bill number ("BILL NO."), a biller department/person-in-charge ("BILLER DEPT./PIC"), a billing date ("BILL DATE"), a billee business operation code ("BILLEE BOP CODE"), billee department/person-in-charge ("BILLEE
15 DEPT./PIC"), a bill amount ("AMOUNT"), a billing description ("DESC."), and the like.

Fig.14A shows a specific example of generated billing data.

The biller terminal 501 equating to approval unit 102
20 executes similar processing to that performed by approval unit 102 described in embodiment 1 with respect to received billing data, and transmits approved billing data to another biller terminal 501 (equating to entry unit 103) and server 506 via biller network 502 and inter-business network 505.

The biller terminal 501 equating to approval unit 102 also receives inputs from the user of billing data whose biller is another company, and transmits the received billing data to the biller terminal 501 equating to entry unit 103
5 via biller network 502.

The biller terminal 501 equating to entry unit 103 transmits the received billing data to biller master terminal 501A via biller network 502, and requests the generation of journal data equating to the billing data parts of CR/DB table
10 110.

A biller terminal 501 equating to NR unit 105, on receipt of a notification indicating the receipt of billing data relating to a full-amount receipt agreement target, transmitted from a billee terminal 503 via billee network
15 504 and inter-business network 505, together with the bill number of the billing data, notifies biller master terminal 501A of the received bill number via biller network 502, and requests that the corresponding FAR flag in the journal data be set to "received".

20 Note that, as mentioned above, it is possible to provide a biller terminal 501 that corresponds to a plurality of the components of biller accounting device 100, instead of separately providing biller terminals 501 that equate to the individual components.

The following description relates to the realization, in accounting system KS3, of processing performed by server 500 in embodiment 2.

Server 506, on receipt of approved billing data, judges
5 whether the billee is a full-amount receipt agreement target by referring to FART list 403 stored in database 507. If judged in the affirmative, server 506 transmits the billing data to a billee terminal 503 equating to BDAT reception unit 201 in the accounting department of the billee via inter-business
10 network 505 and billee network 504, and if judged in the negative, server 506 prints out the billing data.

The following description relates to the realization, in accounting system KS3, of processing performed by billee accounting device 200 in embodiment 2.

15 The billee terminal 503 equating to BDAT reception unit 201, on receipt of the billing data transmitted from server 506, appends a FAR flag showing "received" and a full-amount receipt (FAR) number to the billing data, and transmits this
billing data (hereinafter "receipt data") to billee
20 terminals 503 equating respectively to FAR notification unit 203, entry unit 202, and SDAT generation unit 204 via billee network 504.

Fig.15 shows a specific example of billing data displayed on the display monitor of the billee terminal 503

equating to BDAT reception unit 201, on receipt of billing data relating to a full-amount receipt agreement target, transmitted from server 506.

Fig.14B shows a specific example of receipt data.

5 Note that the FAR flag and the FAR number may be inputted by a user via a screen (e.g. inputs to the items marked by the arrows on the input screen shown in Fig.16), rather than being automatically inputted.

10 The billee terminal 503 equating to FAR notification unit 203, on receipt of the receipt data, transmits a notification indicating the receipt and the bill number of the receipt data to the biller terminal 501 equating to NR unit 105 via billee network 504 and inter-business network 505.

15 Here, the above notification may be conducted, for example, by transmitting an email as soon as the receipt data is received.

20 The billee terminal 503 equating to entry unit 202 transmits the receipt data to billee master terminal 503A via billee network 504, and requests the generation of journal data equating to the billing data parts of CR/DB table 210.

 The billee terminal 503 equating to SDAT generation unit 204 transmits the receipt data or other billing data

inputted by a user (i.e. not relating to a full-amount receipt agreement target) that has been carefully examined (hereinafter "transaction data") to a billee terminal 503 equating to approval unit 205 via billee network 504.

5 The billee terminal 503 equating to approval unit 205 approves received transaction data based on inputs from the user, and appends to approved transaction data, information identifying the person or entity that approved the data.

Fig.14C shows a specific example of transaction data
10 after approval.

The billee terminal 503 equating to approval unit 205 furthermore transmits approved transaction data not relating to a full-amount receipt agreement target to a billee terminal 503 equating to entry unit 206 via billee network
15 504.

The billee terminal 503 equating to entry unit 206 transmits the received transaction data to billing master terminal 503A via billing network 504, and requests the generation of journal data equating to the billing data parts
20 of CR/DB table 210.

Note that, as mentioned above, it is possible to provide a billee terminal 503 that corresponds to a plurality of the components of billee accounting device 200, instead of separately providing billee terminals 503 that equate to the

individual components.

The following description relates to the realization, in accounting system KS3, of processing performed by appropriation devices 300 and 400 in embodiment 2.

5 The following description relates to processing in billee master terminal 501A that equates to processing performed by appropriation device 300.

Biller master terminal 501A, in response to a request from the biller terminal 501 equating to entry unit 103,
10 generates journal data based on received billing data, and enters the generated data in database 508.

Here, "journal data" includes information relating to a biller business operation code ("BILLER BOP CODE"), a bill number ("BILL NO."), a biller department / person-in-charge
15 ("DEPT./PIC"), a billing date ("BILL DATE"), billee business operation code ("BILLEE BOP CODE"), a biller department / person-in-charge ("DEPT./PIC"), a billing amount ("AMOUNT"), a billing description ("DESC."), a full-amount receipt flag ("FAR FLAG"), a clearance flag ("CLR FLAG"), and credit
20 ("CR") and debit ("DB") amounts.

Furthermore, biller master terminal 501A sets the FAR flag in the journal data to "received" in response to a request from the biller terminal 501 equating to NR unit 105, and performs checklist processing based on the FAR flags of

billing data written to the journal data (i.e. processing to clear the billing data for elimination from appropriation in consolidated accounting, by setting the CLR flag of billing data whose FAR flag shows "received" to a flag showing
5 "cleared").

Fig.17 shows a specific example of journal data generated by biller master terminal 501A.

Also, biller master terminal 501A, when instructed by a user, calculates total credit and debit amounts, and an
10 account balance for billing data whose CLR flag shows "uncleared" (i.e. excluding billing data whose CLR flag shows "cleared"), based on information relating to credit and debit amounts written to journal data stored in database 508, and prepares a consolidated financial report such as shown in
15 Fig.5.

The following description relates to processing in billee master terminal 503A that equates to processing performed by appropriation device 400.

Billee master terminal 503A, in response to a request
20 from the biller terminal 503 equating to entry unit 202, generates journal data based on received receipt data, sets the FAR flag of the generated journal data to "received", enters the journal data in database 509, and performs checklist processing based on the FAR flags of billing data

written to the journal data (i.e. processing to clear billing data for elimination from appropriation in consolidated accounting, by setting the CLR flag of billing data whose FAR flag shows "received" to a flag showing "cleared").

5 Also, billee master terminal 503A, in response to a request from the billee terminal 503 equating to entry unit 206, generates journal data based on received transaction data, and enters the generated data in database 509.

10 Fig.18 shows a specific example of journal data generated by billee master terminal 503A.

 Also, billee master terminal 503A, when instructed by a user, calculates total credit and debit amounts, and an account balance for billing data whose CLR flag shows "uncleared" (i.e. excluding billing data whose CLR flag shows
15 "cleared"), based on information relating to credit and debit amounts written to journal data stored in database 509, and prepares a consolidated financial report such as shown in Fig.6.

 Checklist processing is performed on the basis of the
20 CLR flag settings in journal data entered as described above, and a consolidated financial report is prepared after eliminating transactions conducted between Companies A and B. As a result, consolidated financial reports are prepared with inter-business credit and debit amounts that relate to

the same group (i.e. consolidated accounting target) canceling each other out.

Variations

5 The present invention can be similarly implemented with the following variations so long as the category to which the technological ideas behind the invention belong is maintained.

 The databases may be shared.

10 The functions of the servers are described above as having an independent structure to the biller and billee accounting devices, although these functions may be provided in the biller and/or billee accounting devices.

 In the above embodiments, the billee is able to identify
15 billing data that pertains to a full-amount receipt target by the fact that such billing data is transmitted to the billee via a transmission line, while billing data not pertaining to a full-amount receipt target is printed out and mailed to the billee. However, it is also possible for the billee
20 to identify whether billing data pertains to a full-amount receipt target, by appending ID information to billing data indicating that the billing data pertains to a full-amount receipt target.

Although the present invention has been fully described by way of examples with reference to the accompanying drawings, it is to be noted that various changes and modifications will be apparent to those skilled in the art.

5 Therefore, unless such changes and modifications depart from the scope of the present invention, they should be construed as being included therein.